

## CLAIMS

1. A harness for use with breathing apparatus, the harness comprising at least one flexible panel, wherein  
5 the harness is arranged in use to be worn by a user of breathing apparatus and to adopt an operational configuration when so worn, and wherein the flexible panel is of material having resilient characteristics such that the harness at least partly retains its  
10 operational configuration whilst not in use.

2. A harness according to Claim 1, wherein the or each flexible panel is of a composite material.

15 3. A harness according to Claim 2, wherein the composite material comprises foam, which may be a closed-cell, open-face foam, such as compression-moulded EVA foam.

20 4. A harness according to Claim 1, wherein the or each panel comprises a sandwich construction.

5. A harness according to Claim 4, wherein the or each panel comprises two layers of foam enclosing or  
25 encapsulating a layer of stiffer material therebetween.

6. A harness according to Claim 4, wherein the or each panel comprises a single layer of foam sandwiched  
30 between two layers of stiffer material.

7. A harness according to Claim 1, wherein the harness comprises at least one flexible panel which is arranged in use to be worn on a shoulder of a user.

35 8. A harness according to Claim 1, wherein the harness comprises one or more securing straps and a

belt portion, arranged in use to be worn on the waist of a user.

9. A harness according to Claim 1, wherein the  
5 harness includes a flexible mounting plate for receiving a cylinder of breathing gas.

10. A harness according to Claim 9, wherein the mounting plate is of moulded material, such as plastics  
10 material.

11. A harness according to Claim 9, wherein the mounting plate is moulded so as to include one or more recessed portions for receiving one or more components  
15 of breathing apparatus, such as a hose and/or a cylinder manifold.

12. A harness according to Claim 1, wherein the harness comprises one flexible panel arranged in use to  
20 pass around the wearer over one shoulder, in the manner of a bandolier, or sash.

13. A harness according to Claim 1, wherein the harness comprises one or more flexible panels arranged  
25 in use respectively to pass over the shoulders of the wearer in the manner of a backpack or rucksack.

14. A harness for use with breathing equipment, the harness comprising at least one shoulder support panel  
30 and a belt portion, the belt portion comprising attachment means for attaching a cylinder of breathable gas to the belt portion, the attachment means comprising mounting means arranged to engage releasably a mounting portion of a cylinder, and retaining means  
35 arranged to retain a retaining device for the cylinder, wherein, in use, a cylinder may be attached to the belt

portion by both the mounting means and the retaining means or else by the retaining means alone.

15. A harness according to Claim 14, wherein when a  
5 cylinder is attached to the belt portion by both the mounting means and the retaining means, the cylinder and belt portion are juxtaposed in a first configuration, and when the cylinder is attached to the belt portion by only the retaining means the cylinder  
10 and belt portion are loosely attached in a second configuration.

16. A harness according to Claim 14, wherein when, in use, the cylinder and belt portion are retained in the  
15 second configuration a user is able to move the cylinder freely about his person whilst retaining attachment to the cylinder by the retaining means.

17. A harness according to Claim 14, wherein the  
20 retaining means comprises one or more retaining straps and the retaining portion of the cylinder comprises a web, holster or cradle for holding the cylinder.

18. A harness according to Claim 14, wherein the  
25 shoulder support panel is arranged in use to pass around a wearer over one shoulder in the manner of a bandolier or sash, and the belt portion is arranged in use to pass around the waist of the wearer.

30 19. A harness for carrying a cylinder of breathable fluid, the harness including a flexible hip-plate arranged for location on a hip of a wearer, and including at least two connectors for connecting a cylinder containing a fluid for breathing thereto,  
35 wherein a first connector is arranged for connecting a cylinder detachably, and a second connector is arranged

for connecting the cylinder non-detachably, the detachable connector being arranged to hold the cylinder connected thereto in close proximity to the hip-plate, and the non-detachable connector being  
5 arranged to hold the cylinder connected thereto between the legs of a user when the detachable connector between the harness and the cylinder is detached.

20. A harness according to Claim 19, wherein the  
10 cylinder has a manifold, in which the manifold includes a port for connecting a breathing-gas line from the cylinder to a face mask and in which the manifold further includes a connector for connecting the breathing apparatus to an additional fluid supply line.